How to deal with hot weather

With most of the country recently experiencing dry and warm conditions, it's important that beef and lamb farmers consider the affect heat can have on their livestock. We've pulled together our top tips for cattle and sheep to prevent heat stress.

Top tips for managing heat stress in cattle

- Make sure all cattle have access to a good supply of clean drinking water
- Avoid unnecessary handling of cattle. Handle cattle quietly and calmly in the early morning and not in the heat of the day. Cattle require time to recover from high day time temperature so avoid handling in the evening as well
- Consider feeding in the late afternoon rather than the morning as this will allow the heat produced from rumen fermentation, which peaks 4-6 hours after feeding, to be dissipated during the cooler evening/night time
- Provide shade where possible
- High temperatures can also affect fertility so be aware of the potential for reduced intensity of expression of heat and longer oestrus periods in breeding females
- Take steps to control flies as these can spread disease and cause cattle to congregate

Top tips for managing sheep in hot weather

- Provide grazing stock with access to fields that have sufficient shade in the form of hedges or trees and be alert for fly problems. If necessary consider housing animals
- Move, gather, handle or transport animals in the cooler conditions of the early morning or late evening wherever possible
- Give special attention to lambs because they are markedly more susceptible to heat stress than adult sheep
- Consider providing extra forage during the cooler times to help compensate for reduced feeding activity in the heat
- Make sure all sheep have access to a good supply of clean drinking water
- If housing, ensure buildings are adequately ventilated and increase space allowances by reducing stocking densities if possible, should be 1m2 of floor space per ewe and 0.6-0.7m2 per lamb (25-35 kg)

- Maintain particularly good drainage and ventilation in areas of accommodation prone to wetting to avoid the additional heat stress caused by high humidity.

Effects of hot weather on cattle

During periods of warm and dry weather, farmers with suckler cows should consider creep feeding spring-born calves to reduce their grass intake. Introduce creep slowly to avoid acidosis. This will make more grass available for the cows and reduce milk demand. This also helps to minimise nutritional stress in spring calvers for five to six weeks post-serving to reduce potential embryo loss. Heat stress will also affect fertility and embryo survival. Farmers also need to check the nutritional requirements of the bull are being met to ensure he is fit for working. Autumn calvers need to be monitored as some loss of condition may be acceptable, but too much may cause calving problems.

The priorities during hot weather are in-calf and first-calved heifers. They are more sensitive to periods of under-feeding due to their own requirements for growth, as well as their growing calf's needs.

During dry periods, providing straw in fields will act as an indicator of the need for additional feed. If straw intake exceeds 2kg per head per day, supplementary feeding will be needed to maintain condition and performance.

In extreme situations calves should be weaned early to allow the cows and calves to be managed separately. This will allow you to prioritise the needs of both classes of stock. They can either be sold as stores, finished intensively or moved to better grazing.

If possible, finishing cattle could be housed early to free up grass for other stock and to prevent weight loss. However, farmers should ensure that buildings are designed to reduce the risk of heat stress, e.g. with good ventilation and drainage, plus stocking density should be reduced if temperature or humidity becomes a problem.

Under-feeding heifer replacements may result in liveweight targets not being met – they need to be at least 65 per cent of mature bodyweight at first service. This may have consequences in terms of serving age.

Effects of hot weather on sheep

For sheep, farmers should consider weaning lambs to allow the dry ewes and weaned lambs to be managed separately. Lambs might be sold as stores, finished intensively or moved to better grazing. , Once weaned split ewes into groups to meet target for body condition score for the following tupping.

When sward heights are below 4cm, supplementary forage or concentrates will be needed to maintain condition and performance. The aim should be to introduce additional feed before extreme feed shortages to extend the forage and always intro slowly to reduce the risk of acidosis.

Before deciding whether to finish lambs intensively, farmers should evaluate all available feed stocks, stock to feed and cost of gain. Be aware that selling some lambs as stores provides more grazing for other stock. There may be health problems for stock when the grass returns, a surge may increase the risk of grass staggers (hypomagnesaemia) and worm control will become very important.

Clinical signs of heat stress

- Refusal to lie down – possibly to maximise surface area
- Huddling
- Body splashing – attempting to wet coat by splashing head in water trough
- Increased respiration rate – especially serious when accompanied by deep flank movements
- High rectal temperature >41°C
- Open mouth breathing, head extended, tongue protruding, profuse salivation, and front legs held wide to increase lung volume, which is a sign of advanced heat stress

If nothing is done to relieve the situation and their body temperature remains high, there is a danger they could collapse and die. High temperatures will affect feed intakes, growth rates, ovulation, conception rates and bull/ram fertility.

Additional resources:

Managing cattle and sheep during extreme weather events

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